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Charges*

PROGRESS REPORT

FOR

10 MAY 1958

SHAPED CHARGE PRODUCTION

RD 45, TASK ORDER L

25X1

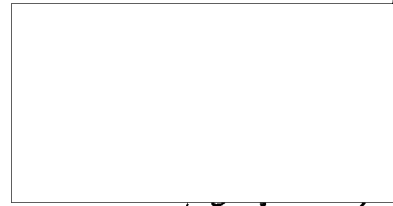
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PROGRESS REPORT
FOR
APRIL 1958
ON
SHAPED CHARGE PRODUCTION
RD 45, TASK ORDER L

20 MAY 1958

Studies of packaging of units for overseas shipment indicate that a corrugated fiberboard carton for each individual unit with a top and bottom spacer will be the most satisfactory. The units should be packaged in standard hinged-top overseas ammunition boxes with water resistant liners.

Drawings were checked and parts received the black anodized protective coating. Shipment of all parts to the assembly location was begun.

PLANS FOR FUTURE WORK

Production of an initial lot of 100 of each of the units will be carried out in the latter part of May. Based on preliminary tests of these assembled items, such minor changes in tooling and procedures as may be required will be made. Production will continue throughout May and into June.

FINANCIAL STATEMENT

Total Amount of Contract	\$ 27,073.00
Expenditures for April 1958	1,678.13
Total Expenditures to 30 April 1958	14,907.30
Balance of Contract	12,165.70

Expiration Date: Extension requested to
4 August 1958.

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PROGRESS REPORT
FOR
MARCH 1958
ON
SHAPED CHARGE PRODUCTION
RD 45, TASK ORDER L

24 April 1958

Extrusions were completed and assembly tooling was checked with assembled parts. It was determined that because of the increase in weight of the four ounce charges due to the use of a screw machine body, the four magnets specified for the 408 assembly (Mark II) would not be sufficient. Tests were performed with various numbers of magnets by increasing weight applied to the end of the charge in standoff position in a direction perpendicular to the axis of the complete unit. All tests were performed with a unit applied to the vertical surface of a file cabinet. These tests indicate that at least six magnets are required by the Mark II unit.

For the Mark I unit, four magnets are ample.

An additional 2000 magnets were placed on order. Preliminary study for packaging for overseas shipment were made. The adaptor for the Mark II unit was found to be undersized and resizing of the entire quantity of adaptors was required.

Drawing modifications were made and additional tooling was completed. The tooling for assembling six magnets in the Mark II unit was designed.

PLANS FOR FUTURE WORK

Drawings completed in March will be checked and parts will be anodized. Shipment of all parts to the assembly location will be made and production assembly will begin.

FINANCIAL STATEMENT

Total Amount of Contract	\$27,073.00
Expenditures for March 1958	3,378.82
Total Expenditures to 31 March 1958	13,229.17
Balance of Contract	13,843.83

Expiration Date: 4 May 1958

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PROGRESS REPORT
FOR
FEBRUARY 1958
ON
SHAPED CHARGE PRODUCTION
RD-45, TASK ORDER L

24 March 1958

Tooling for extrusion cups was completed. Production of cups will begin after delivery of slugs for extrusion. All other parts have been received and inspected. Tooling was continued as scheduling permitted.

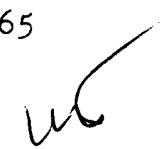
PLANS FOR FUTURE WORK:

Drawing modifications will be made in March. Cups will be extruded and delivered. Unfinished tooling will be completed and pilot assembly will be accomplished.

FINANCIAL STATEMENT:

Total Amount of Contract	\$27,073.00
Expenditures for February 1958	\$ 6,219.37
Total Expenditures to 28 February 1958	\$ 9,850.35
Balance of Contract	\$17,222.65

Expiration Date: 4 May 1958



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**PROGRESS REPORT
FOR
JANUARY 1958
ON
SHAPED CHARGE PRODUCTION
RD-45, TASK ORDER L**

25 February 1958

Test of the alternate sealing designs was performed and the concave rolled ring with a neoprene sealing coat was found to be equivalent to an "O" ring seal.

Caps were made from various materials in the alternate shapes and tested for leakage at high and low temperatures. Ease of removal at low temperatures was evaluated. A vinyl plastisol cap made with a hat-like brim was adopted and parts were placed on order.

Tooling design and construction was continued. A portion of the parts on order were received.

PLANS FOR FUTURE WORK

Additional receipts of materials will be made in February. Tooling for the extruded cups will be completed and production of parts will begin. Unfinished tooling will be completed.

FINANCIAL STATEMENT

Total Amount of Contract	\$27,073.00
Expenditures for January 1958	\$ 2,154.56
Total Expenditures to 31 January 1958	\$ 4,069.84
Balance of Contract	\$23,003.16

Expiration Date: 4 May 1958

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PROGRESS REPORT
FOR
DECEMBER 1957
SHAPED CHARGE PRODUCTION
RD 45, TASK ORDER L

24 JANUARY 1958

Following the fabrication of tentative models of the 4 1/2 ounce and the No. 26A Shaped Charge units, materials and parts for the 406 and 408 modifications were placed on order. Procurement of the "O" rings, caps, and packaging was postponed pending tests of the two alternate sealing designs.

In order to meet the salt-spray resistance requirements, the tube, adapter, cap (if aluminum) and the aluminum 4 1/2 ounce charge shell will be finished with a three-minute etch, a hard anodized coating and a dull, black dye. This precludes spot-welding of the assembly. Several bonding agents are undergoing evaluation and comparison with the mechanical dimpling assembly method.

Parts are scheduled for delivery within sixty days. Final decision regarding closure and seal must be made within three weeks to avoid delays in the program.

Keeper plates for the magnets have been recommended and are also on order.

Assembly tooling will be designed and manufactured during the latter part of January. Test plates will be procured and the balance of the materials will be placed on order.

FINANCIAL STATEMENT

Total Amount of Contract	\$28,933.00
Total Expenditures for December 1957	\$ 1,431.35
Total Expenditures to 31 December 1957	\$ 1,915.28
Balance of Contract	\$27,017.72

Expiration Date: 4 May 1958

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**MONTHLY PROGRESS REPORT
FOR
NOVEMBER 1957
ON
SHAPED CHARGE PRODUCTION**

RD 45, TASK ORDER L

10 DECEMBER 1957

The contract became effective on 4 November 1957. Price and delivery information was obtained on major components. Certain details of assembly were worked out in model form. An alternate sealing method which would reduce the overall length and eliminate the "O" ring assembly operation was explored.

Assembly of magnet adapter to tube can best be accomplished by spot welding. Alternate methods are dimpling and bonding with resins. Models were painted with dull black enamel. An etched anodized finish with a black dye is being investigated for the final item.

Samples of Alnico III, V, and VI magnets were ordered for evaluation purposes. Alternate methods of magnet attachment were attempted. Dimpling of outer rim of the adapter into the "U" portion of the magnet is most effective. Potting of magnets with an elastomer is feasible but not necessary.

In December the individual part configuration and dimensional characteristics will be firmed up and component parts will be placed on order. Delivery of tubes is estimated at 60 to 90 days. Delivery of other parts will run from 45 to 70 days. Test equipment will be obtained and assembly tooling will be designed during the delivery period.

Characteristics of packaging tubes will also be determined and this material will be ordered.

FINANCIAL STATEMENT:

Total Amount of Contract	\$ 28,933.00
Expenditures for November 1957	472.07
Total Expenditures to November 1957	472.07
Balance of Contract	28,460.93

Expiration Date: 4 May 1958